Installing an ARE Memory Upgrade Kit

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Bay Networks

Bay Networks

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About This Guide

If you are responsible for installing Bay Networks® 32 MB or 64 MB memory upgrade modules on an ATM Routing Engine (ARE) processor module, you need to read this guide.

Conventions

italic text	Indicates variable values in command syntax descriptions, new terms, file and directory names, and book titles.
quotation marks (“ ”)	Indicate the title of a chapter or section within a book.

Acronyms

ARE	ATM Routing Engine
SIMM	single inline memory module
VBM	virtual buffer memory

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Valbonne, France	33-4-92-96-69-68	33-4-92-96-69-98
Sydney, Australia	61-2-9927-8800	61-2-9927-8811
Tokyo, Japan	81-3-5402-0180	81-3-5402-0173

Installing ARE Memory Upgrade Modules

This document describes how to install Bay Networks 32 MB or 64 MB memory upgrade modules on an ATM Routing Engine (ARE) processor module.

The memory upgrade is supported by BayRS Version 12.00 and later. To install the memory upgrade modules, you must:

- Attach the antistatic wrist strap.
- Remove the existing virtual buffer memory (VBM) module, if one is installed.
- Install the new VBM module.
- Remove the existing single inline memory modules (SIMMs).
- Install the new SIMMs.
- Attach the upgrade label.

This document describes each of these tasks.

Required Tools

To install the memory upgrade modules, you need the following tools:

- Phillips screwdriver
- Antistatic wrist strap, which comes with the upgrade kit

Shipment Contents

Table 1 lists the components that are part of the 32 MB memory upgrade kit (Order No. AG1311008) and the 64 MB memory upgrade kit (Order No. AG1311021). If any parts are damaged or missing, contact the Bay Networks Technical Solutions Center in your area.

Table 1. Shipment Contents

Item	Quantity
Virtual buffer memory (VBM) module	1
Single inline memory modules (SIMMs)	2
Phillips screws	4
Antistatic wrist strap	1
Upgrade label	1

Attaching the Antistatic Wrist Strap

You will find a disposable antistatic wrist strap with each upgrade kit. The antistatic wrist strap directs the discharge of static electricity from your body to the chassis of the BN router, thereby avoiding discharge to sensitive electronic components.

You must wear the antistatic strap whenever you remove, install, and handle the VBM module or SIMMs.

To attach the antistatic wrist strap:

1. **Remove the strap from the upgrade kit.**
2. **Slip the wrist strap loop over your hand and tighten it snugly around your wrist.**
3. **Attach the alligator clip to the frame of the router.**

You can now safely perform the upgrade procedure.

Removing the Virtual Buffer Memory Module

If you are upgrading an ARE processor module from 16 MB to 32 MB or 64 MB, you must first remove the existing VBM module before you can install the new one.

If you are upgrading from 8 MB to 32 MB, there is no VBM module to remove. In this case, go to the next section, “Installing the Virtual Buffer Memory Module.”

To remove the existing VBM module, you must first remove the ARE processor module from the router. Refer to *Installing and Maintaining BN Routers* for instructions on replacing a FRE®/FRE-2 module.

To remove the VBM module:

1. **Turn the ARE module over (component side down) and place it gently on your work surface.**
2. **Remove the Phillips screws from each of the four mounting holes.**

   Figure 1 shows the location of the 4 Phillips screws.

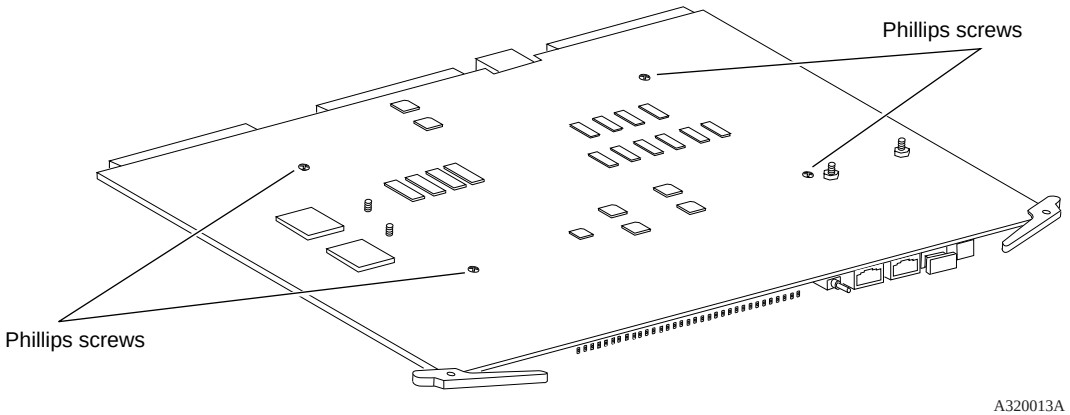

Figure 1. Removing the Mounting Screws

3. **Turn the ARE processor module over (component side up) and place it on your work surface.**

4. **Grasp the VBM module by the edges and lift it to remove it from the ARE processor module.**

   Store the VBM module in an antistatic bag.

5. **Follow the steps in the next section to install the new VBM module.**

Installing the Virtual Buffer Memory Module

If you have not already done so, remove the ARE processor module from the router. Refer to *Installing and Maintaining BN Routers* for instructions on replacing a FRE/FRE-2 module.

To install the VBM module:

1. **Align the two connectors on the VBM module with the connectors on the ARE processor module. At the same time, be sure to align the standoffs on the underside of the VBM module with the mounting holes on the ARE module. Then press the VBM module into place.**

Figure 2 shows the proper alignment of the VBM module.

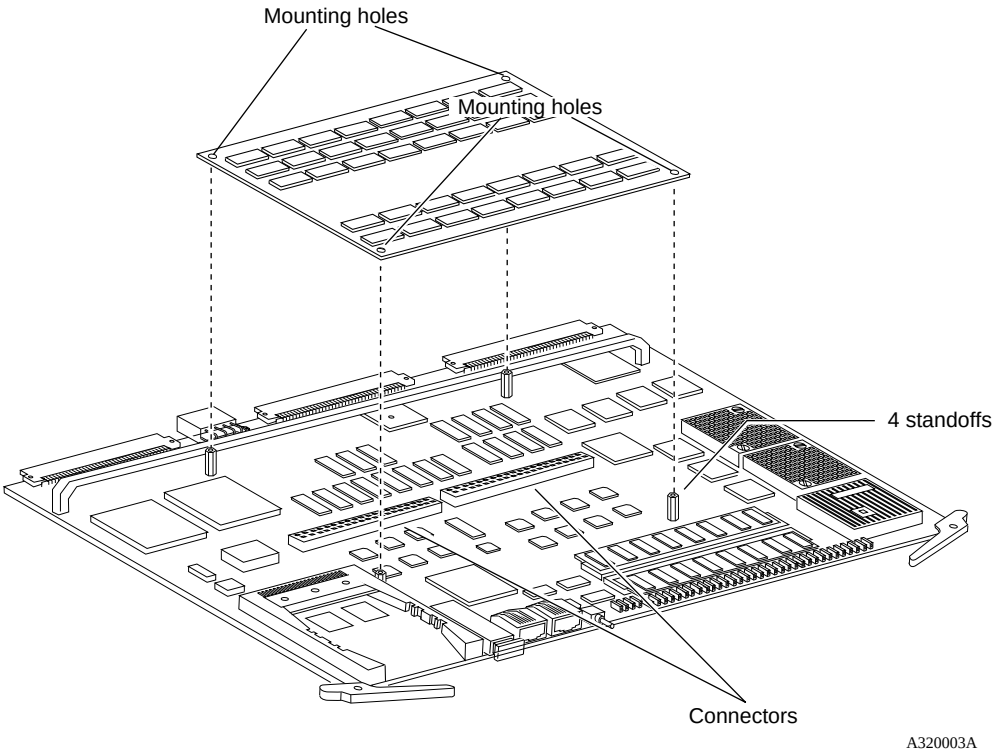

Figure 2. Aligning the VBM Module

2. **Turn the ARE module over (component side down) and place it gently on your work surface.**
3. **In each of the four mounting holes on the module, insert a Phillips screw (Figure 3). Tighten the screw with a Phillips screwdriver.**

Figure 3 shows the location of the 4 Phillips screws.

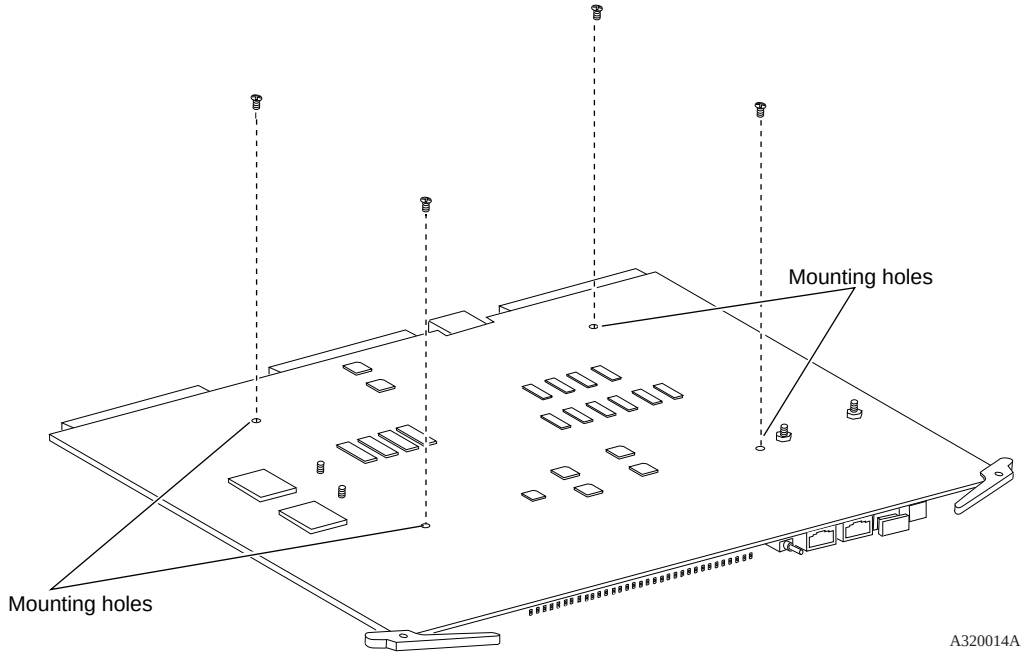

Figure 3. Installing the Mounting Screws

4. **Follow the steps in the next section to install the SIMMs.**

Removing SIMMs from the ARE Processor Module

To remove the existing SIMMs from the ARE processor module:

1. **Turn the ARE module over so that the component side is facing up.**
2. **Using Figure 4 as a reference, locate SIMM sockets U7 and U14 on the ARE processor module.**

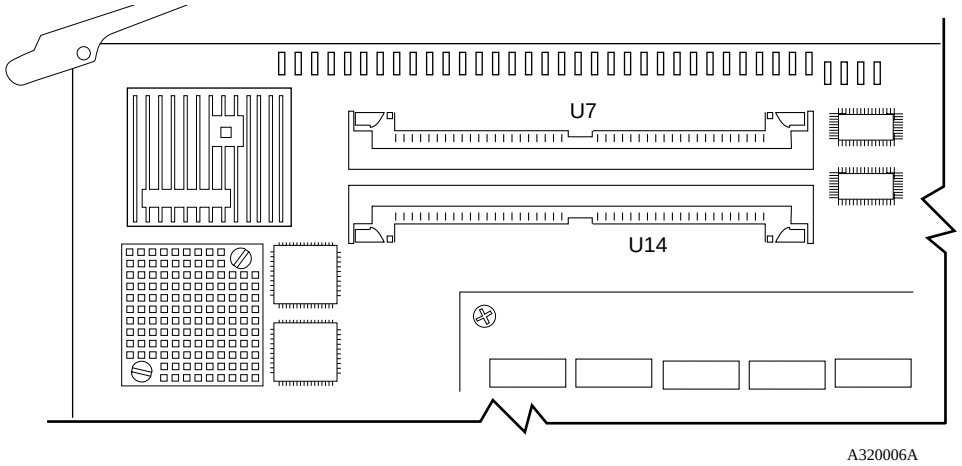

Figure 4. Locating the SIMM Sockets

3. **To remove the SIMMs from sockets U7 and U14:**
   a. **Pull back on the retainers grasping the edges of the SIMM to release it.**
   b. **Gently lift up and pull out the SIMM.**

Installing the Memory Upgrade SIMMs

The upgrade kit contains two identical SIMMs. To install the SIMMs:

1. **Using Figure 4 as a reference, locate SIMM sockets U7 and U14 on the ARE processor module.**

   Sockets U7 and U14 should be empty.

2. **Grasp one of the SIMMs by the edges and turn it so that the key at the center of the SIMM faces the center of socket U7 (Figure 5).**

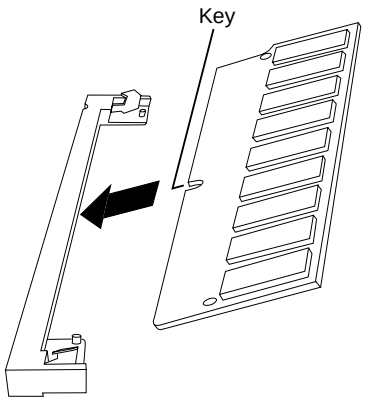

Figure 5. Inserting a SIMM into a Socket

3. **Insert the SIMM into the socket at an angle of approximately 30 degrees from the vertical.**

4. **Gently push down on the module so that the retainers grasp the SIMM, locking it into place (Figure 6).**

   When the SIMM is properly inserted, the two small vertical black poles on the SIMM socket line up with the two holes in the SIMM.

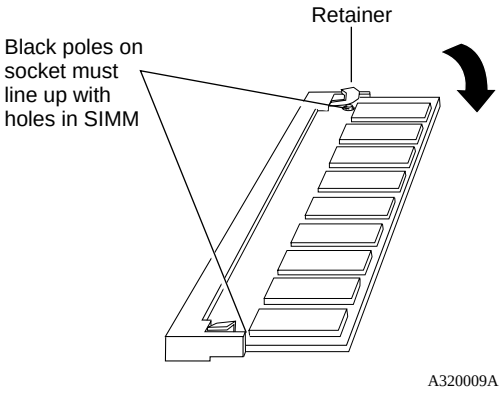

Figure 6. Locking a SIMM in Place

5. **Repeat steps 2 through 4 to install the other SIMM in socket U14.**
6. **Install the ARE processor module in the router.**

   Refer to *Installing and Maintaining BN Routers* for instructions on replacing a FRE/FRE-2 module.

Attaching the Upgrade Label

The upgrade kit comes with a label, either 32 MB Upgrade or 64 MB Upgrade. To apply the label:

1. **Remove the paper backing from the label.**
2. **Place the label on the right ejector lever (Figure 7).**

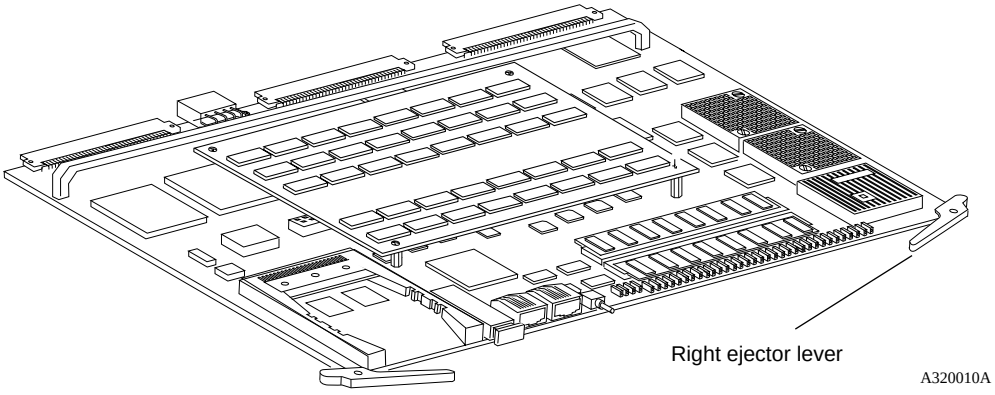

Figure 7. Attaching the Upgrade Label to an ARE Processor Module